

(19)



JAPANESE PATENT OFFICE

PATENT ABSTRACTS OF JAPAN

(11) Publication number: 2000220407 A

(43) Date of publication of application: 08.08.00

(51) Int. Cl

F01D 11/08

(21) Application number: 11019894

(71) Applicant: MITSUBISHI HEAVY IND LTD

(22) Date of filing: 28.01.99

(72) Inventor: KAJIMURA TSUTOMU  
SUZUKI TOSHIYUKI  
MITA SEIJI

(54) TURBINE ENGINE

(57) Abstract:

PROBLEM TO BE SOLVED: To prevent the loss of a working fluid and improve the efficiency of a turbine engine by forming a shroud ring into a tube shape, and providing a pressure regulating device for regulating the clearance so as to communicate with the internal space of the shroud ring.

SOLUTION: A tube-like shroud ring 6 constituting the circumference of a passage for a working fluid (a) is provided around the turbine blade 2 of a turbine rotor 1 with a prescribed clearance (d). The shroud ring 6 is formed into a tube shape having an internal space 6a by use of an expandable and contractible elastic body. The internal space 6a is connected to a pressure controller 7 that is a pressure regulating device. The pressure controller 7 can control the clearance (d) by elastically expanding, contracting, and deforming the expandable and contractible shroud ring 6 by the pressurized air (c) in the space 6a. According to this, since an optimum clearance (d) can be kept,

the loss of the working fluid (a) in the clearance (d) can be suppressed to improve the efficiency of a turbine engine.

COPYRIGHT: (C)2000,JPO

